

REMARKS/ARGUMENTS

Applicants have carefully examined the Office Action mailed May 24, 2004. Claims 1-21 and 23-29 are pending and have been rejected. Applicants respectfully traverse the rejections. For the reasons stated below, Applicants assert that the pending claims are clearly distinguishable over the prior art. Therefore, all pending claims are believed in condition for allowance. Applicants thank Examiner for favorable consideration of claims 10, 21, 24 and 27.

Claims 1-21 and 23-29 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,709,429. Applicants have enclosed a terminal disclaimer in compliance of 37 C.F.R. §1.321(c) with this response in order to overcome the double patenting rejection. Applicants do not concede the correctness of this rejection. However, it is recognized that the '429 patent filing date and term are already the same as any patent issuing on the present application.

Claims 1-4, 6, 11, 13-15 and 17 are rejected under 35 U.S.C. §103(a) as being unpatentable over Webster, Jr. (U.S. Patent No. 5,057,092). Applicants respectfully traverse this rejection. As noted by the Examiner, Webster, Jr. does not teach a helical member such that the axial member is always disposed over the first helical member when the axial member crosses the first helical member, and beneath the second helical member when the axial member crosses the second helical member. The Examiner asserts that at the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to have a helical member such that the axial member is always disposed over the first helical member when the axial member crosses the first helical member, and beneath the second helical member when the axial member crosses the second helical member. Applicants disagree with this assertion.

In order to establish a prima facie case of obviousness, three criteria must be met: there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; some reasonable expectation of success; and the prior art reference must teach or suggest all the claim limitations. M.P.E.P. § 2143. Applicants assert the Examiner has failed to establish a prima facie case of obviousness.

The prior art must suggest the desirability of the claimed invention. There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill. M.P.E.P. § 2143.01. First, Applicants assert that the axial member disposed between the first helical member and the second helical member of the current invention is intended to solve a problem distinct from the motivation to use warp members taught in Webster, Jr. Specifically, the axial member of the current invention is intended to limit elongation of the catheter under tension while not substantially reducing catheter flexibility. See specification page 4, lines 15-22. Conversely, the warp members of Webster, Jr. are intended to have a low modulus of elasticity relative to the helical members in order to increase the bending stiffness of the catheter. See column 1, lines 56-58. Furthermore, the orientation of the longitudinal warp members 28 through braided reinforcing mesh 24 disclosed in Webster, Jr. is not interchangeable with what is claimed in the current application. The specification of the current invention specifically addresses the disadvantages of Webster, Jr. over the advantages of the current invention. There are several disadvantages with the arrangement disclosed in Webster, Jr. expressly discussed in the present application. As stated in the current specification beginning at page 3, line 15:

With [the Webster, Jr.] arrangement, the adjacent polymeric layer may conform to the longitudinal warp members so as to create radial protrusions running the length of the catheter. A protrusion along the inside surface of the catheter may not be desirable because it may create friction or bias with devices inserted therein (e.g., guidewires). A protrusion along the outside surface of the catheter may not be desirable because it may create friction, bias or prevent adequate sealing with devices that the catheter is inserted into (e.g., introducer sheaths, compression fittings, etc.).

Also with this arrangement, the adjacent polymeric layer may become fixed to the longitudinal warp members as it conforms thereto. Fixing the longitudinal warp members to the adjacent polymeric layer may not be desirable because it may limit relative movement and flexure therebetween. Limiting relative movement and flexure may cause excessive stiffness in one or more planes of flexure. This may cause difficulties in manipulating and navigating the catheter through tortuous vasculature, which is clearly undesirable.

The arrangement claimed in the current application overcomes these disadvantages by providing an intravascular catheter that includes a reinforcement layer with an axial member

disposed between the helical members that form the braid. See page 4, lines 10-13. Specific advantages of the current invention as claimed are stated in the specification beginning at page 11, line 19. By positioning the axial member between the helical members, the axial member does not create a radial protrusion or become fixed to an adjacent polymer layer, both of which may create undesirable effects as stated above regarding Webster, Jr. Additional advantages of the arrangement of the current invention as claimed are further exemplified in the specification from page 11, line 19 to page 12, line 16.

Additionally, Webster, Jr. actually teaches away from the configuration as claimed in the current application. The configuration of longitudinal warp members disclosed in Webster, Jr. is intended to increase the stiffness of the catheter in order to reduce the criticality of the wall thickness and hardness of the inner tube and outer sleeve. See column 3, lines 3-6. “A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention.” M.P.E.P. § 2141.02. Therefore, since the warp members of Webster, Jr. are intended to increase stiffness, Webster, Jr. provides no motivation to teach the configuration of the current invention

Furthermore, Applicants respectfully assert that at the time the invention was made, it would not have been an obvious matter of design choice to a person with ordinary skill in the art to create an intravascular catheter having the arrangement as claimed in the current invention. “The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggest the desirability of the combination.” M.P.E.P. § 2143.01. The Examiner admits that Webster, Jr. fails to suggest an axial member disposed between the first helical member and the second helical member such that the axial member is always disposed over the first helical member when the axial member crosses the first helical member, and beneath the second helical member when the axial member crosses the second helical member. The axial member in the present application overcomes the deficiencies of Webster, Jr. as stated above. Applicants assert that it would not have been obvious to one with ordinary skill in the art to modify the teachings of Webster, Jr. to suggest what is claimed in the current application. **Although “[t]he rationale supporting an obviousness rejection may be based on common knowledge in the art or ‘well-known’ prior art, ... [i]f the applicant traverses such an assertion the examiner should cite a reference in support of his or her**

position.” M.P.E.P. § 2144.03. Applicants request the Examiner to provide such a reference if this rejection is renewed.

Applicants respectfully assert that independent claims 1 and 13 include descriptive elements distinguishable from Webster, Jr., therefore placing them in condition for allowance. Claims 2-4, 6 and 11 depend from claim 1 and claims 14, 15 and 17 depend from claim 13 and add significant additional elements. Therefore, they also are believed to be in condition for allowance. Reexamination and reconsideration in light of these remarks is requested.

Claim 12 is rejected under 35 U.S.C. §103(a) as being unpatentable over Webster, Jr. (U.S. Patent No. 5,057,092) in view of Dinh et al. (U.S. Patent No. 6,042,578). Applicants respectfully traverse this rejection. As stated by the Examiner, Webster, Jr. fails to teach at least one element of the present invention as claimed in claim 1 and there is no motivation to modify Webster, Jr. to support a prima facie case of obviousness. Additionally, Dinh et al. fail to rectify the shortcomings of Webster, Jr. Claim 12 depends from claim 1 and adds significant additional elements. Therefore, for the reasons stated above, claim 12 is believed to be in condition for allowance.

Claims 5, 7-9, 16-20, 23, 25-26 and 28-29 are rejected under 35 U.S.C. §103(a) as being unpatentable over Webster, Jr. (U.S. Patent No. 5,057,092) in view of Garabedian et al. (U.S. Patent Publication No. 2003/0097119). Applicants respectfully traverse this rejection and a withdrawal of this rejection is requested. Applicants assert that Garabedian et al. is not prior art to the present application. “Subject matter that is prior art under 35 U.S.C. 102 can be used to support a rejection under section 103.” M.P.E.P. § 2141.01. U.S. patent application publications are prior art under 35 U.S.C. 102(a) and 102(b) as of the publication date, and under 35 U.S.C. 102(e)(1) as of the earliest effective U.S. filing date of the published application. Garabedian et al. appears to fail the requirements for prior art under 35 U.S.C. 102(a) and 102(b), but appears to qualify under 102(e) in effect prior to the 1999 amendment which took effect on November 29, 2000, after the filing date of the present application. However 103(c) applies in this instance to remove the reference as prior art cited against the present application under 35 U.C.S. §103. See M.P.E.P. §2136.01. Section 103(c) as currently amended took effect as of November 29, 1999, prior to the filing date of the current application. Both Garabedian et al. and the present application were subject to an obligation of assignment to the same person at the time the

Application No. 09/487,359
Amdt. dated August 23, 2004
Reply to Office Action dated May 24, 2004

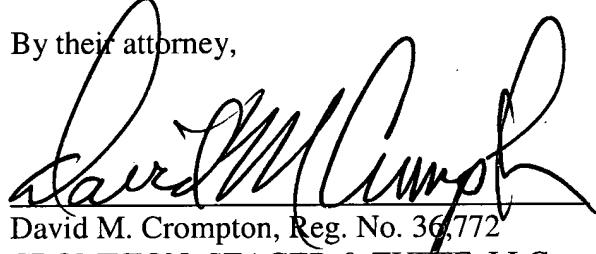
invention was made. The Garabedian assignment to SciMed Life Systems, Inc. can be found at Reel 4806, Frame 0172 and the assignment for the present application to SciMed Life Systems, Inc. may be found at Reel 010801, Frame 0807. Asserting that Garabedian et al. is not prior art to the current application, Applicants respectfully assert that claims 5, 7-9, 16-20, 23, 25-26 and 28-29 are in condition for allowance.

Reexamination and reconsideration of all pending claims, namely claims 1-21 and 23-29, is respectfully requested. It is respectfully submitted that all pending claims are now in condition for allowance. Issuance of a Notice of Allowance in due course is requested. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,

Dean A. Schaefer et al.

By their attorney,



David M. Crompton, Reg. No. 36,772
CROMPTON, SEAGER & TUFT, LLC
1221 Nicollet Avenue, Suite 800
Minneapolis, MN 55403-2420
Telephone: (612) 677-9050
Facsimile: (612) 359-9349

Date: 8/23/04